

ROLLINS WT VS SISTERSVILLE WT ON DRUMS OF  
PCB WASTE SHIPPED ON 5/18/85

	SOLIDS	LIQUIDS
ROLLINS WT INCL. DRUM WT AS RECEIVED	1805#	14,295#
SISTERSVILLE WT W/O DRUM WT	1350#	13,802#
DRUM WT <span style="border: 1px solid black; padding: 2px;">SOLIDS - 8X40# LIQUIDS - 32X60#</span>	320#	1,920#
SISTERSVILLE WT INCL. DRUM WT	1,670#	15,722#
Δ BETWEEN ROLLINS AND SISTERSVILLE WTS.	135#	1427#
% Δ BETWEEN ROLLINS AND SISTERSVILLE WTS.	$\frac{135\#}{1,670\#} \times 100 = 8\%$	$\frac{1427\#}{15,722\#} \times 100 = 9\%$

VIA FEDERAL EXPRESS

***Rollins Environmental Services (NJ) Inc.***  
P.O. Box 337, Bridgeport, New Jersey 08014 (609) 467-3105



***Rollins***

May 7, 1985

UNION CARBIDE CORPORATION  
P.O. Box 180  
Route 2  
Sisterville, WV 26175

ATTN: MR. ED DOERFLEIN

Dear Mr. Doerflein:

Thank you for the opportunity to quote on the transportation and disposal of your PCB and PCB contaminated materials. Enclosed please find proposal for same.

Thank you for your confidence in Rollins Environmental Services to handle your PCB waste management needs. Should you require any further assistance, or have any questions, please do not hesitate to contact me.

Sincerely,

Marty Caparros  
Technical Representative

MEC:tu  
Enclosure: a/i

MPM0001141

EPA004393

I Scope of Work

This proposal covers the following:

1. The transportation of various PCB and PCB contaminated items from Union Carbide Corporation in Sisterville, WV to Rollins Environmental Services (TX) Inc. [RES (TX) Inc.] as per all State and Federal requirements.
2. The disposal of approximately thirty-three 55 gallon drums of PCB contaminated Therminol 60 via high temperature incineration at RES (TX) Inc. as per all State and Federal requirements.
- 4 DR SOLIDS 3. The disposal of approximately two to four 55 gallon drums of PCB contaminated solids (rags, disposable coveralls, etc.) via high temperature incineration at RES (TX) Inc. as per all State and Federal requirements.

4 DR FOAM GLASS  
INSULATION

= 8 DRUMS SOLIDS

II Compensation

A. Transportation

1,254 miles at \$3.45 per loaded mile. . . . . \$4,326.30

TRANSPORTATION SPECIALTY CHARGES: You are allowed 1 hour free loading time and will be charged \$30.00 per hour demurrage up to twenty-four (24) hours, then \$300.00 per day in addition to the \$30.00 per hour demurrage charge. See attached for additional terms and conditions.

B. Incineration

1. <sup>(32)</sup> 30-35 drums of PCB contaminated oil. . . . . \$300.00 per drum
2. <sup>8</sup> ~~24~~ drums of PCB contaminated solids, debris, etc. \$0.70 per pound

III Requirements:

1. It will be necessary for Union Carbide Corporation to certify that all materials are DOT shippable.
2. Union Carbide Corporation will be responsible for all labeling, loading, and manifesting. To obtain a Texas manifest, please contact Ed Hatton (512) 475-5647 at the Texas Department of Water Resources.

III Requirements: (Continued)

3. Due to current incineration demands, RES (NJ) Inc. will not be able to service business quoted until, at best, calendar year 1985, unless otherwise notified in writing. ? PICKUP DATE
4. This proposal may be considered valid for 30 days beginning May 10, 1985.
5. This quotation does not include Local, State or Federal Taxes.

#### GUIDELINES TO PACKAGING AND IDENTIFICATION OF WASTE MATERIALS IN DRUMS

Proper packaging and identification of waste products is essential to assure their arrival at RES intact, to assure safety for all personnel handling the materials, to assure compliance with governmental rules and regulations regarding material shipments and to avoid delays, rejections and additional laboratory handling and transportation charges.

1. Drums must comply with ICC/DOT container and marking specifications. Only DOT Specification 5, 5B without removable heads, and 17E drums may be used to transport PCB's to RES. *17C for solids*
2. Drums must have both bungs in place and tightly closed.
3. Leaking or damaged drums will not be accepted by RES drivers.
4. Each drum must be clearly and indelibly marked with the proper RES code number (HO-XXXX) on the top and side of the container near the top. *When will we get*
5. "Caution" labels and placards and/or precautionary statements ("Poison", "Corrosive", etc.) must be applied as defined and required by the DOT and EPA.
6. Pallets, when used, must meet material handling association specifications.
7. In addition to the Bill of Lading, each shipment must be accompanied by a properly completed Texas Department of Water Resources (TDWR) Manifest Form.

If you have any questions regarding these specifications, please don't hesitate to call your RES PCB Sales Representative.

RES (NJ)  
5/82

MPM0001144

EPA004396

## EXHIBIT "A"

Waste Disposal Contract 100-25517

UCC Identification No. 0380-503066

<b>DELIVERY LOCATION</b>	Union Carbide's Sistersville, West Virginia Plant, located at Rt. 2, Sistersville, West Virginia 26175  (EPA ID No. WVD004325353)
<b>MATERIALS</b> 1. Describe materials and any containers in which such materials are to be delivered to CONTRACTOR. Specify whether such containers are to be provided by UNION CARBIDE or CONTRACTOR and specify which containers are to be so provided, and when and where they are to be provided. If containers are to be returned to UNION CARBIDE, specify which containers, and when, where, via what means, and at whose expense such containers are to be returned. See Contractor PCB Waste Data Sheet HO#15528-48, HO#15527-38, attached hereto and made a part hereof.	Thirty-two fifty-five (55) gallon drums of Therminol 60 containing PCB's whose concentration is 73-190 ppm; four fifty-five (55) gallon drums of solids, including but not limited to floor sweeping, rags, gloves, boots, and disposable clothing contaminated with Therminol 60 and PCB's whose concentration is 73-190 ppm; and four (4) fifty-five (55) gallon drums of foam glass insulation contaminated with Therminol 60 and PCB's whose concentration is 73-190 ppm.
2. Additional Information (if dangerous or hazardous materials, attach sheet with detailed information on hazards and identify sheet here. Specify DOT shipping name and class and EPA description. Specify any special handling instructions.)	See Exhibit I, attached hereto and made a part hereof. See Material Safety Data Sheet for Therminol 60 attached hereto and made a part hereof.
<b>WORK</b> Describe Work to be performed. (Indicate specific services to be performed, such as package, accept, load, transport, treat, store and dispose. Indicate method of treatment, storage and disposal. If CONTRACTOR has responsibility for marking and labeling containers in which materials are to be tendered to CONTRACTOR or to perform any other service for UNION CARBIDE prior to delivery of Materials so specify. If treatment or storage is required so indicate and specify the treatment or storage location. Indicate any portion of the Work which is to be subcontracted and name of subcontractor.)	Contractor shall accept at the Delivery Location, transport and dispose of materials via incineration at the Disposal Location, all in accordance with all currently applicable federal, state and local laws, including but not limited to federal PCB regulations and Federal DOT regulations, 49 CFR. Union Carbide shall appropriately package, mark and label all materials, complete manifests and shipping papers and load materials onto truck provided by Contractor.
<b>DISPOSAL LOCATION</b> Indicate nature and specific location of disposal area.	Contractor shall dispose of materials via incineration at its EPA permitted incinerator located at Deer Park, TX (EPA ID No. TXD055141378)

MPM0001145

EPA004397

EXHIBIT "A" (Continued)

Waste Disposal Contract 100-25517

UCC Identification No. 0380-503066

**QUANTITY**

(Specify quantity. If no definite quantity, describe how quantity is determined, such as, such quantity as UNION CARBIDE designates for the Work during period between \_\_\_\_\_ and \_\_\_\_\_).

Thirty-two (32) fifty-five gallon drums of Therminol 60 contaminated with PCB's whose concentration is 73-190 ppm.  
Eight (8) fifty-five (55) gallon drums of solids contaminated with Therminol 60 and PCB's whose concentration is 73-190 ppm.  
(1350 lbs. solids)

**ORDERING PROCEDURE AND SCHEDULES**

(Specify delivery schedule or procedure for ordering and scheduling deliveries of the Quantity of Materials. Also specify any time limit for a pickup after order is given).

Materials shall be picked up and disposed of in accordance with a schedule mutually agreed upon by Union Carbide's John Buzzard and Contractor's Marty Caparros.

UNION CARBIDE CORPORATION

By John Buzzard  
John Buzzard  
Title Purchasing Agent

Agreed to this \_\_\_\_\_ day of \_\_\_\_\_, 1985

ROLLINS ENVIRONMENTAL SERVICES

By \_\_\_\_\_

Title \_\_\_\_\_

**EXHIBIT "B"**Waste Disposal Contract 100-25517

UCC Identification No. 0380-503066

<b>A. QUANTITY MEASUREMENT</b> (Specify method of measurement and place where it is to be conducted)	Thirty-two (32) fifty-five gallon drums of Therminol 60 contaminated with PCB's whose concentration is 73-190 ppm. Eight (8) fifty-five (55) gallon drums of solids contaminated with Therminol 60 and PCB's whose concentration is 73-190 ppm. (1350 lbs. solids)
<b>B. CONTRACT PRICE</b>	See Exhibit II, attached hereto and made a part hereof.
<b>C. INVOICING INSTRUCTIONS</b>	Invoices shall show Identification No. 0380-503066 and are to be mailed in duplicate to: Union Carbide Corporation Post Office Box 180 Sistersville, West Virginia 26175  UNION CARBIDE CORPORATION By <u>John Buzzard</u> Title <u>Purchasing Agent</u>

Agreed to this \_\_\_\_\_ day of \_\_\_\_\_, 1985.

ROLLINS ENVIRONMENTAL SERVICES

By \_\_\_\_\_

Title \_\_\_\_\_

MPM0001147

EPA004399



EXHIBIT I

Solids (drummed)

DOT Shipping Name: Contains Polychlorinated Biphenyls  
DOT Hazard Class : ORM-E  
DOT UN # : UN 2315, "RQ"  
Required Labels : ORM-E, Polychlorinated Biphenyls, RQ  
EPA Description : Contains PCB's

NOTE: Mark drums with "UN 2315" in addition to required labels.

NOTE: Note on manifest and containers that primary constituents are  
"gloves, rags, floorsweep, disposable clothing, foam glass  
insulation".

Therminol 60 Drums

DOT Shipping Name: Contains Polychlorinated Biphenyls  
DOT Hazard Class : ORM-E  
DOT UN # : UN 2315, "RQ"  
Required Labels : Polychlorinated Biphenyls, ORM-E, "RQ"  
EPA Description : Contains PCB's

NOTE: Mark all drums with "UN 2315" in addition to required labels.

Waste Disposal Contract 100-25517

UCC Identification No. 0380-503066

EXHIBIT II

Disposal

PCB - Contaminated Therminol 60: \$300.00 / drum  
Solids : \$ 0.70 / pound  
Disposal Taxes : At Cost

Transportation

Transportation : \$ 3.45 / loaded mile  
Demurrage : \$30.00 / Hr. after 1 free hour

MPM0001149

EPA004401

## PURCHASE AUTHORIZATION AND SAVINGS RECORD

VENDOR

Rollins Environmental Services

DIVISION(S) AND LOCATION(S)

S &amp; UI Sistersville, W. Va.

DATE

5/13/85

ORDER OR CONTRACT NO. OR DATE OF AGREEMENT

0380-503066

COMMODITY, JOB OR SERVICE

Transportation &amp; Disposal of PCB's

COMMODITY CODE

3575C

PURCHASE IS FOR  
GOVERNMENT CONTRACT  
SEE SECTION 15

PLEASE INDICATE YOUR REVIEW AND/OR APPROVAL OF PURCHASE AND FORWARD

DEPARTMENT	NAME	SIGNATURE	DATE
Share	Bob Foster	<i>B. Foster</i>	5/13/85
Hamtrac	Larry Farley	<i>L. Farley</i>	5/13/85
380 - Managers	W. V. Summers	<i>W. Summers</i>	5/13/85
P & MS	Jerry Fahn		
Environ. Law	S. K. Phillips		

## COMMITMENT RESUME

TOTAL COMMITMENT VALUE:

\$15,500.

TOTAL ESTIMATED SAVINGS:

RETURN TO

John Buzzard - Location 380

FIRST YEAR VALUE IF  
MULTI-YEAR COMMITMENTFIRST YEAR SAVINGS IF  
MULTI-YEAR COMMITMENTCONTRACT PERIOD, SHIPMENT OR  
DELIVERY DATE

PURCHASE AUTHORITY

% OF USAGE

☐ REQUISITION☐ LETTER DATED☐ OTHER

CURRENT PUBLISHED SOURCE AND PRICE

REQUIRED BY SEC. 147

☐ YES ☐ NO

PMS CONTACT

COMPLETED?

☐ YES ☐ NO

PERSON CONTACTED

DATE

BY

PHONE ☐LETTER ☐PROCUREMENT  
PLAN COPY ☐

REASON IF NO OR LATE CONTACT

PRICE DECREASED (APPARENT  
SAVINGS DESCRIBED BELOW)

%

PRICE SAME AS LAST  
AGREEMENTPRICE INCREASED  
(EXPLAIN IN REMARKS)

%

## BASIS FOR AWARD (REFER TO SECTION 3.2 OF THE PURCHASING MANUAL)

EVALUATED  
LOW PRICE (SEE WORKSHEET)

NEGOTIATED PURCHASE

ENGINEERING OR USER  
PREFERENCE NOT  
EVALUATED LOW PRICE

OTHER

## SAVINGS SUMMARY (EXPLAIN IN REMARKS)

NOTE: Numbers Used Refer to Purchasing Savings Definitions  
SEE SECTION 3.3 OF THE PURCHASING MANUAL

- (1) NEW VENDOR
- (2) ALTERNATE MATERIAL
- (3) CHANGED QUANTITY
- (4) AVOIDANCE INDUSTRY  
WIDE PRICE INCREASE
- (5) DIRECT PRICE REDUCTION
- (6) OPTION
- (7) SPARE PARTS
- (8) ESCALATION
- (9) FINANCIAL TERMS
- (10) INVENTORY REDUCTION
- (11) TRANSPORTATION
- (12) PACKAGING, MATERIALS  
HANDLING
- (13) OTHER

REMARKS: (NOTE: REMARKS MUST BE COMPLETED IF OTHER THAN EVALUATED LOW PRICE IS CHECKED)

Rollins was best able to meet the 30 day deadline for  
disposal of this material.

Pick up is scheduled for Saturday, May 18, 1985.

30 day deadline is May 21, 1985.

PURCHASING AGENT (SIGNATURE)

SUPPORTING DOCUMENTATION SHOULD BE ATTACHED

MPM0001150

EPA004402

POLYCHLORINATED BIPHENYLS (PCB) WASTE DATA SHEET  
Schedule "A" Attachment

*Rollins Environmental Services (TX) LLC*  
P. O. Box 609, Deer Park, Texas 77536 (713) 479-6001

**BILLING INFORMATION:**

RES HO#-15528-48 (Solids)  
To be assigned by RES  
HO#15527-38 (Liquid)

COMPANY NAME Union Carbide Corporation

**PICK-UP LOCATION:**

COMPANY NAME Union Carbide Corporation

ADDRESS Route 2 P. O. Box 180

ADDRESS Route 2

CITY Sistersville

CITY Sistersville

STATE West Virginia ZIP 26175

STATE West Virginia ZIP 26175

CONTACT J. R. Buzzard Phone 304-652-3211 Ex. 206

**MANIFEST INFORMATION:**

USEPA ID NO. WVDO 04325353

(For proper return of Shipping Control)  
(Ticket, please complete the following)

TEXAS TDWR ID NO. 99954

COMPANY NAME Union Carbide Corporation

CONTACT E. L. Doerflein

ADDRESS P. O. Box 180

PHONE 304-652-3211 Ex. 286

CITY Sistersville

STATE West Virginia ZIP 26175

CONTACT E. L. Doerflein

PHONE 304-652-3211 Ex. 286

**LIQUID PCB WASTE DESCRIPTION:**

Name of Original PCB Fluid Monsanto Therminol 60 Quantity 30-35 55 gal drums

Name of Flushing Solvent Used NONE Quantity 0

Total Volume of Disposal 1650 - 1925 Gallons Spec. Gravity 0.994

PCB Concentration 73 to 190 ppm How was concentration determined? Laboratory Analysis

The waste for disposal is a liquid with sludge? YES NO X

The waste contains water? YES NO X NOW MUCH

**LABORATORY DATA ON WASTE:**

Heat of Combustion 19,000 BTU/LB

Ash Less Than 1.0 Wt %

Flash Point 310 °F COC

Viscosity 13 @ 100C Centipoise

(If under 140°F it is a D001 Hazardous Waste.)

Vapor Pressure Less Than 1.0 psi  
(Less Than 0.1 Millimeter - HG @ 20°C)

**METALS:**

This Section must be completed with "0" or actual content.

\*Pb 0 Mg/L Other 0 Mg/L \*S 0 % Wt

\*Hg 0 Mg/L Other 0 Mg/L \*Cl Less Than 0.05 % Wt

\*NOTE: Metals analyses are required, please complete these blanks.

**STORAGE:** Currently stored in:

Transformer

55 Gallon Drums DOT 17E

Tank

Other (Describe)

MPM0001151

EPA004403

**SOLID PCB WASTE DESCRIPTION:**

Capacitors In drums with:	DOT Spec. Type of Drum	Quantity	Total Wt. Pounds
Leaking Capacitors:	_____	_____	_____
Non-Leaking Capacitors:	_____	_____	_____

Capacitors in Boxes:	Type of Box Steel, Wood, etc.	Quantity	Total Wt. Pounds
_____	_____	_____	_____
_____	_____	_____	_____

Capacitors on Pallets:	No. of Pallets	Total Quantity of Capacitors	Total Wt. Pounds
_____	_____	_____	_____
_____	_____	_____	_____

Other PCB Articles: (Please Describe) Four to Eight 55-gallon DOT-17C drums of  
asbestos pipe insulation contaminated with Therminol 60 described on front. Two to Four  
55-gallon DOT 17C drums of solids (rags, disposable coveralls, etc.) contaminated with  
Therminol 60 described on front.

**TRANSPORTATION REQUIREMENTS:**

**Liquid PCB Bulk Shipments**  
Access for 40-foot tractor and tanker.  
Access to within 20-feet of load point.  
Truck will be equipped with one each:  
2"x20' Loading Line  
2"x20' Venting Hose  
Client must have 2 inch vent line connection with 20 feet of the load point.  
Client must provide for pumping material into the tanker.


**Liquid PCB Drum Shipments**  
Access for 40-foot tractor and van.  
Access to within 14-feet of vertical clearance.  
All drums will be inspected by driver before loading.  
Driver has authority to reject a drum he deems unsafe for transport.  
Client will load drums under driver supervision.  
DOT approved PCB drum (Stamped on drum): Rollins' HO-XXXX Number should be marked on the top and side of the drum.

**Solid PCB Shipments**  
Access for 40-foot tractor and van.  
Access to within 14-feet of vertical clearance.  
All materials will be inspected by driver before loading.  
Driver has authority to reject materials he deems unsafe for transport.  
Client will load the materials under driver supervision.  
If in drum(s): Rollins' HO-XXXX Number should be marked on the top and side of the drum.

**SCHEDULING:**

Should you have any questions regarding this form, our services, or wish to schedule a pick-up, please contact your sales Representative at (609) 467-3105.

NAME (Print) Edmond L. Dnerflein Title Sr. Environmental Engineer

\* Signature  Date 4/30/85

\* IMPORTANT: ALL WASTE DATA SHEETS MUST BE SIGNED AND DATED.

RES(TX) PCB Sch.A 8/82

MPM0001152

EPA004404

Monsanto MATERIAL SAFETY DATA

NOTE:

NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE INFORMATION AND RECOMMENDATIONS HEREIN. SEE PAGE 4 FOR CONDITIONS UNDER WHICH DATA ARE FURNISHED.

MONSANTO PRODUCT NAME

THERMINOL® 60

MONSANTO COMPANY  
800 N. LINDBERGH BLVD.  
ST. LOUIS, MO. 63166  
EMERGENCY PHONE NO.  
(CALL COLLECT)

314-694-1000

PRODUCT IDENTIFICATION

CHEMICAL FAMILY: Aromatic hydrocarbon

DOT PROPER SHIPPING NAME: None

DOT HAZARD CLASS: None

DOT LABEL(S): None

WARNING STATEMENTS

Handle in accordance with good industrial hygiene and safety practice.

PRECAUTIONARY MEASURES

Heat transfer fluids are intended only for INDIRECT heating purposes. Under no circumstances should this product contact or in any way contaminate food, animal feed, food products, food chemicals, food packaging materials, pharmaceuticals or any items which may directly or indirectly be ultimately ingested by humans. Any contact may contaminate these items to the extent that their destruction may be required.

Precautions against ignitions and fire should be taken with this product.

EMERGENCY AND FIRST AID PROCEDURES

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician. Flush skin with water.

Monsanto MATERIAL SAFETY DATA

## OCCUPATIONAL CONTROL PROCEDURES

Eye Protection - Not required for handling this material.

Skin Protection - Wear protective gloves to minimize contact.

Respiratory Protection - Use NIOSH approved equipment when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application.

Ventilation - Provide sufficient ventilation to minimize exposure. Local exhaust ventilation preferred.

Airborne Exposure Limits - Product: Therminol 60 wt. % 100  
 OSHA PEL: None established  
 ACGIH TLV: None established

## FIRE PROTECTION INFORMATION

IGNITION TEMPERATURE °F \_\_\_\_\_ \* FLASH POINT °F 310  
 METHOD: CLEVELAND OPEN CUP

FLAMMABLE LIMITS \_\_\_\_\_ \*

Extinguishing Media: dry powder, CO<sub>2</sub>, chemical foam or water fog.

\*Not Available

## PHYSIOLOGICAL EFFECTS SUMMARY

Oral LD50 (Rats): 13,000 mg/kg, "Practically Non-Toxic"  
 Dermal LD50 (Rabbit): >7940 mg/kg, "Practically Non-Toxic"  
 Eye Irritation (Rabbit): (FHSA) Score 12.0/110.0, "Slightly Irritating"  
 Skin Irritation (Rabbit): (FHSA) Score 4.3/8.0, "Moderately Irritating"  
 Aerosol Inhalation (Rats): 14.7 mg/L for 4 hrs, 0 deaths occurred in 10 rats

Patch testing of 50 volunteers with THERMINOL 60 produced no positive reactions initially or during the induction phase of 15 daily applications. Subsequent challenge 2 weeks later revealed evidence of delayed sensitization on 1 individual.

No adverse effects were displayed in a 90-day rat feeding study with diets containing 500, 2000, and 6000 ppm THERMINOL 60.

In a 30-day aerosol inhalation study with rats exposed to THERMINOL 60 in concentrations of 10, 50, and 250 mg/m<sup>3</sup>, 6 hrs/day, 5 days/week for a period of 30 days, hypoactivity was noted at the highest dose levels.

THERMINOL 60 was fed to rats at 1000 and 2000 ppm for 18 months. The no effect level for chronic toxic effects was 2000 ppm. No evidence of a carcinogenic response was observed.

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**PHYSICAL DATA**

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Appearance: Clear yellow to orange liquid

Boiling Point: 297°C

Vapor Pressure: <0.1 mm Hg @ 20°C

Specific Gravity: 0.994 @ 20/4°C

Solubility: Water-insoluble      Hydrocarbons-soluble

Pour Point: <-85°F

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**REACTIVITY DATA**

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MATERIALS TO AVOID      None

HAZARDOUS DECOMPOSITION PRODUCTS      No uniquely hazardous decomposition products are expected. If the product is burned, as with any organic material, complete combustion produces carbon dioxide and water. Partial combustion produces carbon monoxide, smoke, soot and low molecular weight hydrocarbons.

HAZARDOUS POLYMERIZATION      Does not occur.

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**SPILL, LEAK & DISPOSAL INFORMATION**

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WASTE DISPOSAL      Dispose of by incineration or in a secure Class I landfill.

SPILL OR LEAKAGE PROCEDURES      Absorb spilled or leaked material on clay, sawdust, or other absorbent material, sweep up and dispose of in a secure Class I landfill.

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**ADDITIONAL COMMENTS**

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Environmental Toxicity Information

96 hr LC50 Bluegill: 13 mg/L, "Slightly Toxic"

96 hr LC50 Trout: 3.2 mg/L, "Moderately Toxic"

96 hr LC50 Fathead Minnows: 14 mg/L, "Slightly Toxic"

48 hr EC50 Daphnia: 0.45 ppm, "Highly Toxic"

A 14 day toxicity study with rainbow trout using concentrations of 0.15, 0.36, 0.71, 1.38 and 3.19 mg/L THERMINOL 60 demonstrated the time independent LC50 value to be 0.98 mg/L by days 5 through 14. An adverse effect on growth as measured by weight gain was found in all but the lowest dose. The no effect concentration was 0.15 mg/L.

The primary degradation rate of THERMINOL 60, in a concentration of 3 or 8 ppm in a semi-continuous activated sludge procedure is 61±8%, biodegradability is classed as intermediate.

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DATE    JUNE, 1981    REVISED    ☒    SUPERCEDES

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FOR ADDITIONAL NON-EMERGENCY INFORMATION, CONTACT:

Margaret E. Klaus, Coordinator

Product Acceptability and Environmental Affairs

Specialty Chemicals Division

Monsanto Industrial Chemicals Co.

Monsanto MATERIAL SAFETY DATA

MPM0001155

EPA004407



**NOTE:**

ALTHOUGH THE INFORMATION AND RECOMMENDATIONS SET FORTH IN THIS SHEET ARE BELIEVED TO BE CORRECT AS OF THE DATE HEREOF, MONSANTO COMPANY MAKES NO REPRESENTATION AS TO THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION AND RECOMMENDATIONS. MONSANTO COMPANY SHALL IN NO EVENT BE RESPONSIBLE FOR ANY DAMAGES OF WHATSOEVER NATURE DIRECTLY OR INDIRECTLY RESULTING FROM THE PUBLICATION OR USE OF OR RELIANCE UPON SUCH INFORMATION AND RECOMMENDATIONS.

NO WARRANTY, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT OR TO THE INFORMATION AND RECOMMENDATIONS HEREIN IS MADE HEREUNDER.

This form has been approved by the Occupational Safety and Health Administration as "equivalent to" OSHA Form 20.



## ROLLINS ENVIRONMENTAL SERVICES (TX) INC.

2027 PATTLEGROUND RD  
DEER PARK TX  
713-479-6001

## INVOICE

NO 116983  
CUST NO 01763  
DATE 05/21/85  
PAGE 1

INVOICE

UNION CARBIDE SISTERSVILLE  
P O BOX 180  
ROUTE 2  
SISTESVILLE WV 26175  
ATT: ACCOUNTS PAYABLE

RECEIVED

## CUSTOMER REFERENCE

380-503066

## STREAM NO. &amp; DESCRIPTION

H 15528  
PCB DEBRIS

## CARRIER REFERENCE

4K

ITEM NO.	B/L NO. B/L DATE MFST. NO.	PRICE CODE	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
1	25910 5/18/85 TDWR136443	1109 3812 3811  9999	TREATMENT PCB'S PCB TRANSPORTATION DELAY CHARGE  TOTAL	1805.00 1.00 2.00	LBS	.7000 4,326.3000 30.0000	1,263.50 4,326.30 60.00  5,649.80

Union Carbide Corporation Sistersville

MAY 28 1985  
RECEIVED

RECEIVED BY:

APPROVED BY: *[Signature]*

CHARGE:

112010-156

RECEIPT NO:

PLEASE NOTE REMITTANCE ADDRESS

TERMS: NET DUE UPON RECEIPT OF INVOICE

A SERVICE CHARGE OF 1.50% PER MONTH WILL BE CHARGED ON PAST DUE AMOUNTS.

INQUIRIES: PLEASE PHONE MARGIE HILL

AT 713-479-6001 WITH ANY QUESTIONS

SHIP TO: P.O. BOX 96233

CHICAGO

IL 60693

ATTACHMENTS:

COPY-TO:

P O BOX 180

ROUTE 2

SISTESVILLE

WV 26175

RES 270 3/83

CUSTOMER ORIGINAL

MPM0001157

EPA004409



## ROLLINS ENVIRONMENTAL SERVICES (TX) INC.

2000 BATTLEGROUND RD  
DE. PAR. WV 26175  
713-479-4000

INVOICE  
NO 116984  
CUST NO 01763  
DATE 05/21/85  
PAGE 1

INVOICE

UNION CARBIDE SISTERSVILLE  
P O BOX 180  
ROUTE 2  
SISTESVILLE WV 26175  
ATT: ACCOUNTS PAYABLE

RECEIVED

CUSTOMER REFERENCE

380-503066

STREAM NO. &amp; DESCRIPTION

H 15527  
PCB LTQ

CARRIER REFERENCE

4K

ITEM NO.	B/L NO. B/L DATE MFST. NO.	PRICE CODE	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
1	25910-1 5/18/85 TDWR136443	1106	TREATMENT	32.00	55D	300.0000	9,600.00
		9999	TOTAL				9,600.00

Union Carbide Corporation Sistersville

MAY 28 1985  
RECEIVED

RECEIVED BY: \_\_\_\_\_  
APPROVED BY: *[Signature]*  
CHARGE: 112010 156  
RECEIPT NO: \_\_\_\_\_

PLEASE NOTE REMITTANCE ADDRESS

TERMS: NET DUE UPON RECEIPT OF INVOICE

A SERVICE CHARGE OF 1.50% PER MONTH WILL BE CHARGED ON PAST DUE AMOUNTS.

INQUIRIES: PLEASE PHONE MARGIE HILL

AT 713-479-6001 WITH ANY QUESTIONS

REMIT TO: P.O. BOX 96233

CHICAGO

IL 60693

ATTACHMENTS:

RES 270 3/83

CUSTOMER ORIGINAL

COPY-TO:

P O BOX 180

ROUTE 2

SISTESVILLE

WV 26175

MPM0001158

EPA004410



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form approved. OMB No. 2000-0404. Expires 7-31-86

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. WV 000 4325353		Manifest Document No. 36443		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address Union Carbide Corporation - Sistersville Plant P O Box 180 Sistersville, WV 26175						A. State Manifest Document Number 00122117							
4. Generator's Phone (304) 892-3211						B. State Generator's ID 99954							
5. Transporter 1 Company Name Rollins Environmental Serv (TX) Inc						C. State Transporter's ID 4415							
6. US EPA ID Number TX D 055141378						D. Transporter's Phone 713-479-6001							
7. Transporter 2 Company Name						E. State Transporter's ID							
8. US EPA ID Number						F. Transporter's Phone							
9. Designated Facility Name and Site Address Rollins Environmental Services (TX), Inc P O Box 609 -- 2027 Battleground Rd. Deer Park, Texas 77536						G. State Facility's ID 01429							
10. US EPA ID Number						H. Facility's Phone							
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers No.		13. Total Quantity		14. Unit Wt/Vol		Waste No.	
a. Contains Polychlorinated Biphenyls, ORM-E, UN 2315, RQ, Liquid						32		DM		13,802		P. 118870	
b. Contains Polychlorinated Biphenyls, ORM-E, UN 2315, RQ, Solids (rags, absorbent, insulation, etc)						8		DM		1,350		P. 179430	
c.													
d.													
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.													
Printed/Typed Name E. L. Doerflein										Signature <i>E L Doerflein</i>		Date 5/19/86	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name <i>John P. ...</i>										Signature <i>John P. ...</i>		Date 05/19/86	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name										Signature		Date	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.													
Printed/Typed Name										Signature		Date	

SHOW ENTIRE B L NO. ON YOUR FREIGHT BILL AS PAYMENT IS BASED ON THIS NUMBER

**B 500001**

BILL OF LADING NUMBER

**STRAIGHT BILL OF LADING • SHORT FORM — ORIGINAL • Not Negotiable**RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading from: **UNION CARBIDE CORPORATION**

PAGE \_\_\_\_\_ OF \_\_\_\_\_

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word "carrier" being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery in said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, on its receipt of all or any of said property or any portion of said route to destination, and on its receipt of any time interest in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Freight Bill of Lading and (1) to Uniform Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, his title in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor.)

USE P OR C IN APPROPRIATE BOX TO INDICATE TERMS OF SHIPMENT

"TO BE PREPAID"

COLLECT

VEHICLE INITIALS AND NO.

**7367**

SEAL NOS.

REMITTANCE COPY  
MUST BE  
SUBMITTED WITH  
FREIGHT BILL

1 > DATE **5/17/85** ORIGIN POINT **Long Reach, WV**  
2 ORIGIN CARRIER **Rollins Environmental Services (TX), Inc.** CARRIER CODE NO.:  
3 > **H-R VACUUM SERVICES**  
4 CONSIGNEE TO **Rollins Environmental Services (TX), Inc.**  
5 AND **P O Box 609 -- 2027 Battleground Rd.**  
6 DESTINATION **Deer Park, Texas 77536**  
7  
8 > CUSTOMER'S ORDER NO.  
9  
10  
11 > SHIPPER'S ORDER NO. **SSO # 709262**  
12  
13  
14  
15  
16 > ROUTE

NUMBER AND TYPES OF PACKAGE	HM	DOT SHIPPING NAME (HAZARD CLASS)	FREIGHT DESCRIPTION OF ARTICLES SPECIAL MARKS AND EXCEPTIONS (2) (3)	WEIGHT (1) (2)
32 Drums	X	Contains Polychlorinated Biphenyls, ORM-E, UN 2315, RQ, Liquid	Chemicals, NOIBN	13,802 Lbs.
8 Drums	X	Contains Polychlorinated Biphenyls, ORM-E, UN 2315, RQ, Solids (rags, absorbent, insulation, etc.)	Drums containing solid waste (rags, absorbent, insulation, etc.)	1,350 Lbs.
TOTAL WEIGHT				15,152 Lbs.

(Shipper's imprint in lieu of stamp; not a part of bill of lading approved by the Interstate Commerce Commission.)

(1) If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is the carrier's or shipper's weight.  
(2) The description and weight indicated on this bill of lading are correct subject to verification by the Weighing and Inspection Bureau according to agreement.  
(3) NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The released value of the property is hereby stated by the shipper to be not exceeding \$1.65 per pound for each distribution package or any higher value permitted by ICC MC-992 or .10 per lb. or per lb. per article, whichever value results in the lowest transportation charges on the date of shipment.

THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.



UNION CARBIDE CORPORATION

PER

PERMANENT POST OFFICE **UNION CARBIDE CORPORATION**  
ADDRESS OF SHIPPER **OLD RIDGEBURY ROAD, DANBURY, CONN. 06817**

MAIL PREPAID FREIGHT BILLS TO  
UNION CARBIDE CORPORATION  
POST OFFICE BOX 180  
SISTERSVILLE, W. VA 26175

† WHEN CARRIER FURNISHES CONTAINER, CARRIER CERTIFIES THAT THE CONTAINER SUPPLIED BY IT FOR THIS SHIPMENT IS A PROPER CONTAINER FOR THE TRANSPORTATION OF EACH COMMODITY NAMED HEREON.  
† CARRIER HEREBY ACKNOWLEDGES THAT PRIOR TO OR AT THE TIME THIS SHIPMENT WAS OFFERED FOR TRANSPORTATION, THE SHIPPER PROVIDED OR AFFIXED, ACCORDING TO APPLICABLE REGULATIONS, THE REQUIRED PLACARDS OR ORANGE PANELS (INCLUDING PRESCRIBED IDENTIFICATION NUMBERS) FOR EACH HAZARDOUS MATERIAL NAMED HEREON.

CARRIER

PER

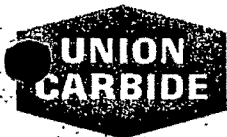
FOR CHEMICAL EMERGENCY SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 800-424-9300

GR 1-326-675A (7/84)

ORIGINAL COPY

MPM0001160

EPA004412



## UNION CARBIDE CORPORATION

ISSUED BY—  
DIVISION NAME  
AND ADDRESSP O Box 180  
Sistersville, WV 26175SHIPPING  
ORDER

NO 709262

SHIP AND  
CHARGE TO  
(UNLESS  
OTHERWISE  
SPECIFIED)Rollins Environmental Services (TX), Inc.  
P O Box 609 -- #027 Battleground Rd.  
Deer Park, Texas 77536

CHARGE TO:

## RETURN REQUESTED:

PRIMARY ACCOUNT	D/E	TO DIV./LOC.	TO ACCOUNT	INDX NO.	1ST ORDER NO.	2ND ORDER NO.	C&P GEN.	CRAFT CODE	FRMN CODE	PROJECT NO.
112010156										
DATE ISSUED 5/17/85		FREIGHT CHARGES		ACCT. OF BUYER		ACCT. OF SELLER TRANS. PREPAID		ORDER NUMBER PO # 0380-503066		
SHIP VIA 4-K VACUUM SERVICES		F. O. B.		SHIP POINT/DEST.		COLLECT PREPAID <input type="checkbox"/>		VALUATION FOR SHIPPING PURPOSES <input checked="" type="checkbox"/>		
DATE SHIPPED 5/18/85		KIND OF CONTAINERS 55-gal Drums		NUMBER OF CONTAINERS 40		GROSS WEIGHT		NET WEIGHT 15,152 Lbs.		
SHIPPING DATA		PREPAID CHARGES		CAR AND INITIAL NUMBER		SIGNATURE (SHIPPING DEPT)				

PCB-contaminated Waste

REQUESTED BY S. Ombledge

APPROVED BY

## DISTRIBUTION OF COPIES

1. (WHITE)—WITH GOODS
2. (GREEN)—SHIPPING DEPT.
3. (G ROD)—COST SCHEDULE
4. (BUFF)—ACCOUNTING
5. (BLUE)—DEPT. FILL'G. ORDER
6. (PINK)—PURCHASING

UC 383-1C

MPM0001161

EPA004413

EPA004414